

00.01180



BellSouth Telecommunications, Inc.  
333 Commerce Street, Suite 2101  
Nashville, TN 37201-3300

guy.hicks@bellsouth.com

REC'D - TEL  
REGULATORY AUTH.  
JUL 20 2001 PM 1 47  
OFFICE OF THE  
EXECUTIVE SECRETARY  
Guy M. Hicks  
General Counsel  
615 214 6301  
Fax 615 214 7406

VIA HAND DELIVERY

David Waddell, Executive Secretary  
Tennessee Regulatory Authority  
460 James Robertson Parkway  
Nashville, TN 37238

Dear Mr. Waddell:

Enclosed are the original and thirteen copies of the Direct Testimony of Wiley G. (Jerry) Latham, Jr. on behalf of BellSouth. Copies of the enclosed are being provided to counsel for Covad.

Very truly yours,

A handwritten signature in black ink, appearing to read "Guy M. Hicks", with a long, sweeping horizontal line extending to the right.

Guy M. Hicks

GMH:ch  
Enclosure

### CERTIFICATE OF SERVICE


I hereby certify that on July 20, 2001, a copy of the foregoing document was served on the parties of record, via the method indicated:

- ☐ Hand
- ☒ Mail
- ☐ Facsimile
- ☐ Overnight

Henry Walker, Esquire  
Boult, Cummings, et al.  
P. O. Box 198062  
Nashville, TN 37219-8062

- ☐ Hand
- ☒ Mail
- ☐ Facsimile
- ☐ Overnight

Catherine F. Boone, Esq.  
Covad Communications Company  
10 Glenlake Parkway, Suite 650  
Atlanta, GA 30328

A handwritten signature in black ink, appearing to read "Catherine F. Boone", is written over a horizontal line.

BELLSOUTH TELECOMMUNICATIONS, INC.  
TESTIMONY OF WILEY G. (JERRY) LATHAM, JR.  
BEFORE THE TENNESSEE REGULATORY AUTHORITY  
DOCKET NO. 00-01130  
JULY 20, 2001

Q. PLEASE STATE YOUR NAME, ADDRESS AND OCCUPATION.

A. My name is Wiley G. (Jerry) Latham Jr. My business address is 3535 Colonnade Parkway, Birmingham, Alabama. I am BellSouth's Product Manager for Unbundled Loops within Interconnection Services – Marketing and have been employed by BellSouth for fifteen years.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to address Issues 5(a), 5(b), and 5(c). Issue 5(a) raises the question, should BellSouth be required to provide unbundled voice-grade, ADSL, HDSL, and UCL loops within 3 business days, or should BellSouth be permitted to take up to an unspecified amount of time to install a loop. Issue 5(b) raises the question, should BellSouth be required to provide an Integrated Digital Subscriber Line (IDSL)-Compatible Loop to Covad within five business days from submission of a Local Service Request, or should provisioning of an IDSL-Compatible Loop (UDC) be solely subject to BellSouth's unilateral "Interval Guide". Issue 5(c) raises the question, should BellSouth de-condition loops requested by Covad within 5 business days, or should BellSouth be permitted to take up to 30 business days to de-condition a

1 loop. I will address each of these issues in turn.

2

3 **ISSUE 5(a): Should BellSouth be required to provide unbundled voice-**  
4 **grade, ADSL, HDSL, and UCL loops within 3 business days, or should**  
5 **BellSouth be permitted to take up to an unspecified amount of time to**  
6 **install a loop?**

7

8 Q. PLEASE BRIEFLY DESCRIBE THE LOOP PROVISIONING

9 INTERVALS THAT MAY BE REQUIRED BY BELL SOUTH TO

10 PROVIDE UNBUNDLED VOICE GRADE, ADSL, HDSL, AND UCL

11 LOOPS IN ISSUE 5(a).

12

13 A. An unbundled voice-grade loop is a circuit that will support those services  
14 known as Plain Old Telephone Service (POTS). Such loops may be  
15 provisioned using any technology that can support voice grade services. This  
16 includes loaded-copper, non-loaded copper, Digital Loop Carrier ("DLC"),  
17 fiber, or any combination of these. Within BellSouth, voice grade loops come  
18 in two versions – Service Level 1 (SL1) and Service Level 2 (SL2). An SL1  
19 loop is a 2-wire voice grade loop that is non-designed, is not provisioned  
20 with test points and does not include a Design Layout Record (DLR) or  
21 any type of coordinated conversion activity. An SL2 loop can be a  
22 designed 2-wire or 4-wire circuit, is provisioned with a test point and  
23 comes standard with a DLR and Order Coordination.

24

25 An ADSL loop will meet Revised Resistance Design (RRD) standards. RRD

1 standards require a non-loaded copper loop, up to 18,000 feet in length, with  
2 up to 6,000 ft of BT inclusive of loop length, and 1300 ohms or resistance.  
3 “Inclusive of loop length” means that for every foot of BT, the loop length is  
4 reduced by an equal amount. Therefore, a RRD loop that has 4,000 ft of BT  
5 could be no longer than 14,000 ft.

6

7 An HDSL loop is a circuit that meets stringent industry standards for Carrier  
8 Serving Area (CSA) transmission specifications that better support DSL  
9 services. Under these strict technical standards, the end user must be served  
10 by non-loaded copper and the loop typically cannot be more than 12,000 feet  
11 long. If 26-gauge copper is used, the limit is 9,000 feet or less. HDSL-  
12 Capable loops may have up to 2,500 ft of BT, and 850 ohms or less of  
13 resistance.

14

15 Unbundled Copper Loops can be ordered in three different ways.

- 16 1) The UCL-Short is a 2-wire or 4-wire loop that provides a non-loaded or  
17 “clean” copper pair to an end user using the Resistance Design (RD)  
18 industry standard. Under the RD standard, these loops may be up  
19 to 18,000 feet long and may have up to 6,000 feet of bridged tap (“BT”)  
20 exclusive of the loop length. In other words, a UCL-Short loop can be  
21 18,000 feet long and have up to 6,000 feet of BT. These loops will have  
22 no more than 1300 ohms of resistance.
- 23 2) The UCL-Long is a 2-wire or 4-wire copper loop that is longer than  
24 18,000 feet and may have up to 2800 ohms of resistance. Normal telephony  
25 standards dictate that all copper loops exceeding 18,000 feet in length must

1 be loaded to properly service dial-tone or POTS type customers.  
2 Therefore, in almost all cases, a CLEC seeking to provide functioning  
3 DSL service will need, to place an order for "loop conditioning" –  
4 BellSouth's Unbundled Loop Modifications (ULM) product - to remove  
5 the load coils and/or BT from these loops in order to transform them into  
6 "dry" or "clean" copper loops. The CLEC would pay the ULM costs  
7 separate from the cost of the loop itself.

8 3) The Unbundled Copper Loop – Non Designed (UCL-ND). It will be a  
9 non-loaded copper loop that will have 1300 ohms or less of resistance  
10 and will not have a specific length limitation. The length will be  
11 driven by many factors and will generally be less than 18,000 feet  
12 long. This loop will not go through the "design" process. Therefore, it  
13 will not have a remote access test point and will not come standard  
14 with a Design Layout Record (DLR).

15

16 Q.WHAT INTERVALS DOES BELL SOUTH BELIEVE ARE APPROPRIATE  
17 FOR THE PROVISIONING OF THESE LOOPS?

18

19 A. The interval for installing voice-grade, ADSL, HDSL and UCL unbundled  
20 loops should be six business days. This includes one business day for the  
21 Firm Order Confirmation (FOC), on accurate orders received before 10am,  
22 plus five business days to complete the loop provisioning. Service Level 1  
23 (SL1) voice grade loops should have an interval of five business days (1 for  
24 the FOC plus 4 for the loop) due to the fact that these loops are non-designed  
25 and are intended for POTS-type services. When the LSR is received after

1 10am local time, the FOC interval would increase by one day.

2

3 These intervals are needed to efficiently and accurately install the volume of  
4 loops being demanded by our CLEC customers. It is also important to  
5 remember that provisioning unbundled loops is not the same as turning up  
6 retail circuits that may already be connected to BellSouth's switch. In these  
7 cases, relatively simple software translations may be all that is needed to  
8 activate a circuit. By comparison, an unbundled loop involves cross-connects  
9 elements that must be provided to connect the loop facility to the CLEC's  
10 collocation space. Also, in most cases, BellSouth and the CLEC will be  
11 working together to ensure the circuit is properly tested and connected through  
12 to the CLEC's equipment so that the CLEC's service can be provided to the  
13 end user at the predetermined cut-over time. Many of the above activities  
14 must be done in sequence and involve multiple work groups within BellSouth.  
15 This is why the intervals listed above are needed.

16

17 **ISSUE 5(b): Should BellSouth be required to provide an IDSL-**  
18 **Compatible loop to Covad within five business days from submission of a**  
19 **Local Service Request, or should provisioning of an IDSL-Compatible**  
20 **Loops (UDC) be solely subject to BellSouth's unilateral "Interval**  
21 **Guide"?**

22

23 Q. PLEASE BRIEFLY DESCRIBE AN IDSL-COMPATIBLE LOOP.

24

25 A. An Integrated Digital Subscriber Line (IDSL)-compatible loop is also known

1 as an Universal Digital Channel (UDC) Loop. As recognized by the FCC in  
2 its 00-238 Order, not all ISDN loops are completely compatible with IDSL  
3 service. Because of this, BellSouth developed the UDC loop, which was  
4 introduced on May 31, 2000. This loop is identical to the ISDN loop, but is  
5 provisioned in a manner that supports "data-only" ISDN, which will better  
6 meet the needs of CLECs who want to deploy IDSL.

7

8 Q. WHAT INTERVAL DOES BELLSOUTH BELIEVE IS THE  
9 APPROPRIATE INTERVAL FOR THE PROVISIONING OF IDSL-  
10 COMPATIBLE LOOPS?

11

12 A. The interval needed to provision the IDSL-compatible loop (also known as the  
13 Universal Digital Channel (UDC)) should be longer than the loops listed in  
14 5(a) above. This is due to the fact that these circuits are more complex in how  
15 they can be provisioned; therefore, they require a more complicated  
16 provisioning process when compared to other loop types. When these circuits  
17 are provided through a Digital Loop Carrier (DLC) system, they require a  
18 specialized line card in order to function properly. In addition, they also must  
19 be provided on certain slots within the DLC in order to be compatible with  
20 IDSL service. Therefore, the appropriate provisioning interval for these loops  
21 is 10 business days plus the FOC interval described in my discussion of Issue  
22 5(a). This is consistent with the interval BellSouth uses to provide ISDN  
23 service to its retail customers.

24

25 **ISSUE 5(c): Should BellSouth de-condition loops requested by Covad**



1       **within 5 business days, or should BellSouth be permitted to take up to 30**  
2       **business days to de-condition a loop?**

3

4   Q. PLEASE BRIEFLY DESCRIBE LOOP CONDITIONING.

5

6   A. Loop conditioning is the removal of equipment or devices that diminish a  
7       loop's ability to provide advanced data services such as DSL.

8

9   Q. WHAT DOES BELLSOUTH BELIEVE IS THE APPROPRIATE  
10   INTERVAL FOR PERFORMING THE WORK NECESSARY TO  
11   CONDITION A LOOP?

12

13   A. The appropriate interval to condition a loop (by removing equipment such as  
14       load coils, repeaters, filters, etc., or to remove bridged tap) should be as  
15       follows for the removal of 1 – 3 intervening devices:

16               Aerial Plant = 10 days

17               Buried Plant = 15 days

18               Underground Plant = 30 days

19

20       These intervals take into consideration the difficulties involved with the  
21       placement of different types of facilities; the expected volumes of  
22       conditioning orders; and the scheduling and dispatching of technicians. Loop  
23       facilities placed in aerial sections are most accessible and typically present  
24       fewer problems to the technicians. Buried loop plant is more difficult to  
25       access due to the fact that equipment may be needed to dig up the facilities

1 prior to conditioning. Underground loop plant is generally most difficult to  
2 access and can present many problems to the technicians who are attempting  
3 to condition these facilities. These problems may include: gaining municipal  
4 authority to close a street; pumping water and/or hazardous gas from a  
5 manhole; un-racking and re-racking large splice cases; and dealing with older  
6 pulp-type cables, to name a few. However, in order to be consistent with new  
7 targets and intervals set in other states, BellSouth will agree to provision all  
8 loops that require loop conditioning within 14 business days.

9

10 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

11

12 A. Yes.

13

14

15

16

17

18

19

20

21

22

23

24

25

AFFIDAVIT

STATE OF: Alabama  
COUNTY OF: Jefferson

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared Wiley Gerald Latham – Product Manager- Unbundled Loops, BellSouth Telecommunications Inc., who, being by me first duly sworn deposed and said that:

He is appearing as a witness before the Tennessee Regulatory Authority in Docket No. 00-01130 on behalf of BellSouth Telecommunications, Inc., and if present before the Authority and duly sworn, his testimony would be set forth in the annexed testimony consisting of 8 pages and 0 exhibit(s).



Wiley Gerald Latham

Sworn to and subscribed  
before me on July 20, 2001



NOTARY PUBLIC

Notary Public, Gwinnett County, Georgia  
My Commission Expires June 27, 2005